Table of Contents

GENERAL BACKGROUND INFORMATION:

The following guidelines were developed to assist districts in writing a contract change order to comply with the new National Pollutant Discharge Elimination System (NPDES) permits. The contract change order will be required for all on-going construction projects that require the development of Storm Water Pollution Prevention Plans (SWPPPs). Projects that require Water Pollution Control Plans (WPCPs) are not regulated by NPDES and will not require contract change order at this time.

One contract change order is required for all SWPPP projects, including local or oversight projects on state's right-of-way. The district construction storm water coordinator (DCSWC) or resident engineer should review the SWPPP, and draft specific changes for contract change order.

Contract Change Order
Caltrans NPDES Permit:

The permit entitled, the *NPDES Permit for Storm Water Discharges for the State of California, Department of Transportation (Caltrans) Order No. 99-06-DWQ*, hereafter referred to as the "Caltrans Permit", was adopted on July 15, 1999, and applies to all SWPPP type projects within Caltrans' right-of-way. Most contracts will probably not require extensive field changes to comply with the Caltrans Permit. The costs for compliance with this permit should not be extensive, unless numerous field changes are required.

General Construction NPDES Permit:

The permit is entitled, the *NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ* hereafter referred to as the "General Permit" currently applies to Caltrans.

Storm Water Management Plan (SWMP)

The SWMP is entitled, Statewide Storm Water Management Plan, was a requirement in the Caltrans Permit mandated by the State Water Resources Control Board (SWRCB). The SWMP describes the procedures and practices Caltrans uses to manage pollutants discharged from its storm water drainage system. The final edition was issued and submitted to the SWRCB on August 31, 2000.

Statewide Storm Water Quality Practice Guidelines (Practice Guidelines)

The Practice Guidelines entitled, "Statewide Storm Water Quality Practice Guidelines", provide implementation criteria for construction's best management practices (BMPs) included in the SWMP for statewide application. The final edition was issued and submitted to the SWRCB on August 31, 2000.

CONTRACT CHANGE ORDER STEPS

STEP-1 REVIEW THIS DOCUMENT: The person(s) responsible for drafting the contract change order should first review this entire document. Note portions of the contract change order templates have instructions that should be deleted. The DCSWCs have an electronic copy of this document.

STEP-2 REVIEW CURRENT SWPPP vs. CONTRACT & PAST REQUIREMENTS: Resident engineers should conduct a cursory review of the existing SWPPP document to ensure that the existing SWPPP requirements are incorporated and or addressed in the SWPPP. Existing SWPPP requirements include the contract requirements and Caltrans Storm Water Quality Handbook – Construction Contractor's Guide and Specifications dated April 1997 including the August 30, 1997 addendum (Handbook). SWPPPs that did not utilize this Handbook will require the preparation of a revised SWPPP consistent with this Handbook and the additional requirements in this contract change order.

Any deficiencies identified will be included in the submittal to the contractor in STEP 4. Deficiencies that are based upon contract requirements should be included in the SWPPP at no additional cost to the State.

STEP-3 COMPARE SWPPP vs. CONTRACT CHANGE ORDER CHECKLIST (New Permit Requirements): The resident engineer reviews the SWPPP against contract change order checklist to determine the portions of the SWPPP that need revision and to estimate the hours and cost the contractor will need to expend to revise the SWPPP.

STEP-4 SUBMIT CONTRACT CHANGE ORDER CHECKLIST TO CONTRACTOR: The resident engineer provides the contractor a copy of the completed checklist or a modified version using the electronic version on which items that are checked "yes" can be deleted. The contractor is to develop a cost proposal to revise the SWPPP.

STEP-5 CONTRACTOR SUBMITS COST PROPOSAL FOR SWPPP REVISION AND RESIDENT ENGINEER ISSUES FIRST CONTRACT CHANGE ORDER: The resident engineer reviews the contractor's initial cost proposal for the contract change order. If a fair price is proposed the resident engineer instructs the contractor to proceed with contract change order work and to prepare the revised SWPPP. The resident engineer processes the contract change order.

STEP-6 CONTRACTOR SUBMITS REVISED SWPPP & CONTRACT CHANGE ORDER LIST OF ITEMS: Using the Contract Change Order Checklist and the contract change order the contractor revises the SWPPP and prepares the "Contract Change Order List of Items". The list of items is a summary of additional control measures and/or quantity increases necessary to comply with the Caltrans and the General Permit.

STEP-7 PREPARE SECOND CONTRACT CHANGE ORDER TO MAKE CHANGES TO THE WORK: The resident engineer reviews the revised SWPPP and the "List of Items", prepares the contract change order and the contractor proceeds to make the field changes as provided in the approved contract change order.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER TEMPLATE #1

The following pages contain instructions and a template for the contract change order. Please be careful to ensure that the instructions are deleted in the final contract change order package.

CONTRACT CHANGE ORDER NO.:___ SUPPL. NO. __0__

ROAD:_____ SHEET __1__ OF _____ SHEETS

FEDERAL NO. (S):_____ CONTRACT NO.

TO:_____ CONTRACTOR.

You are hereby directed to make the herein-described changes from the plans and specifications or do the following described work not included in the plans and specifications on this contract.
NOTE: This change order is not effective until approved by the Chief Engineer.

Description of work to be done, estimate of quantities, and prices to be paid. Segregate between additional work at contract price, agreed price and force account. Unless otherwise stated, rates for rental equipment cover only such time as equipment is actually used and no allowance will be made for idle time.
Change requested by: ENGINEER

The last percentage shown is the net accumulated increase or decrease from the original in the Engineer's Estimate.

Adjustment of Compensation at Agreed Lump Sum: $_____

Para-1

The contractor shall revise and resubmit for approval the existing SWPPP document to comply with the provisions of the NPDES Permit for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities and Activities, Order No.99-06-DWQ. General Construction Activity Storm Water Permit No. CAS000002, Water Quality Order No. 99- 08-DWQ issued by the State Water Resources Control Board and Caltrans Statewide Storm Water Management Plan (SWMP) and the Statewide Storm Water Quality Practice Guidelines (Practice Guidelines) dated August 31, 2000. These permits hereafter referred to as the "Permits", regulate storm water discharges associated with construction activities. The contractor shall revise the SWPPP according to the provisions contained in the Permits, SWMP, and Practice Guidelines according to Contract Change Order Checklist of this contract change order.

Districts shall identify a time frame required to revise, submit and review the SWPPP, and the number of copies required. The recommended time frames are 5 to 10 days for the Contractor to revise; 5 to 10 days for the first review period; and 3 to 5 days for the second review. Districts may revise the language provided as necessary to fit the project.

Para-2

Within ( ) days after the engineer directs the contractor to proceed with this contract change order, the contractor shall revise and resubmit ( ) copies of the SWPPP to the Engineer. The contractor shall allow ( ) days for the engineer to review the Revised SWPPP. If further revisions are required, as determined by the engineer, the contractor shall revise and resubmit the SWPPP within ( ) days of receipt of the engineer's comments and shall allow ( ) days for the engineer to review the revisions."

Para-3

Insert number of approved SWPPP documents required. For most insert 3 or 4.

Upon the engineer's approval of the Revised SWPPP, ( ) additional copies of the SWPPP, incorporating the required changes shall be submitted to the engineer. The engineer may conditionally approve the revisions while minor changes are actively being completed. The engineer may stop or redirect work for failing to comply with the requirements of the Permits, and or the approved Revised SWPPP.

Para-4

With the revised SWPPP submittal, the contractor shall include for review and approval by the resident engineer a Revised List of Items that identifies the **additional** control measures, and or the quantity increases necessary to comply with the Permits, SWMP, Practice Guidelines and the Contract Change Order Checklist. The List of Items shall include a lump sum price for "Revising, and Resubmitting" the SWPPP, including all of the amendments to date, and identify the additional control measures and or items requiring an increase in quantity. The contractor shall include the additional quantities, unit cost, and total cost for each additional control measure required by the Permits, SWMP, Practice Guidelines and as required in Contract Change Order Checklist. In addition, the Revised SWPPP and water pollution control drawings shall clearly delineate the location of the additional control measures and differentiate either by color or symbol the added control measures. The submittal shall include a copy of the Contract Change Order Checklist with a letter indicating that all items in the checklist were addressed in the revised SWPPP or reasons for not doing so.

Para –5

The contract change order lump sum price paid for "Revise and Resubmit SWPPP" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in reviewing, and revising the previously approved SWPPP according to the Permits, SWMP, Practice Guidelines and as indicated in the Contract Change Order Checklist of this contract change order. After the engineer's approval of the Revised SWPPP, amendments shall be considered as part of the original lump sum price for Revise and Resubmit SWPPP, and no additional compensation will be allowed.

CONTRACT CHANGE ORDER LIST OF ITEMS

Contract No. _____
CONTRACT CHANGE ORDER No. _____

CHANGE ORDER TO COMPLY WITH THE PROVISIONS FOR THE CALTRANS NPDES PERMIT (ORDER NO 99-06-DWQ), THE GENERAL PERMIT FOR CONSTRUCTION (ORDER 99-08-DWQ) AND CALTRANS STATEWIDE STORM WATER MANAGEMENT PLAN (SWMP) AND THE STATEWIDE STORM WATER QUALITY PRACTICE GUIDELINES (PRACTICE GUIDELINES) DATED AUGUST 31, 2000

SUMMARY OF ADDITIONAL CONTROL MEASURES AND/OR QUANTITY INCREASES NECESSARY TO COMPLY WITH THE CALTRANS AND THE GENERAL PERMIT, SWMP AND PRACTICE GUIDELINES

NEW ITEM DESCRIPTION Include checklist #	**UNIT**	**QUANTITY**	**VALUE**	**METHOD OF PAYMENT**	**AMOUNT**
Proposed New Items					
New Item: _____					
New Item: _____					
New Item: _____					
New Item: _____					
New Item: _____					
New Item: _____					
Proposed Increases for Existing Items.*	**UNIT**	**QUANTITY INCREASE**	**VALUE**	**METHOD OF PAYMENT**	**AMOUNT**
Exist Item: _____					
Exist Item: _____					
Exist Item: _____					
Exist Item: _____					
Exist Item: _____					
Exist Item: _____					
Exist Item: _____					

* Existing Items includes contract items & items included in the original SWPPP Schedule of Values.

TOTAL:_____

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER TEMPLATE #2

CONTRACT CHANGE ORDER NO.:___ SUPPL. NO. __1__

ROAD:_____ SHEET __1__ OF _____ SHEETS

FEDERAL NO. (S):_____ CONTRACT NO.

TO:_____ CONTRACTOR.

You are hereby directed to make the herein-described changes from the plans and specifications or do the following described work not included in the plans and specifications on this contract.
NOTE: This change order is not effective until approved by the Chief Engineer.

Description of work to be done, estimate of quantities, and prices to be paid. Segregate between additional work at contract price, agreed price and force account. Unless otherwise stated, rates for rental equipment cover only such time as equipment is actually used and no allowance will be made for idle time.
Change requested by: ENGINEER

The last percentage shown is the net accumulated increase or decrease from the original in the Engineer's Estimate.

Extrawork at Agreed Lump Sum: $_____

Payment may be at: the unit price included in the schedule of values; by contract unit price if a contract item; or at agreed item price. If this is a change to the contract item of work, and the change increases the cost of doing the work, the work should be identified as an adjustment of compensation to the contract item. If this new work and it is not like any of the contract work, then it should be added as extra work.

Para – 1

The contractor shall "Implement Additional Water Pollution Control Measures" as identified on the "Contract Change Order List of Items" and as shown in the revised SWPPP.

Para – *2*

The contract change order price paid shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing, constructing, maintaining, removing and disposing of the additional control measures identified in the contract change order's List of Items. The contract change order price shall **exclude** those items previously paid for under the contract's original lump sum, for developing, preparing, obtaining approval of, and for amending the revised SWPPP, and for work specified in the Special Provisions, Standard Specifications and as directed by the engineer.

CONTRACT CHANGE ORDER CHECKLIST

The resident engineer shall review the existing SWPPP document, and all amendments to date against the criteria provided in the checklist provided below. The resident engineer shall provide the contractor a copy of the completed checklist or a modified version deleting the checklist items that are checked yes and are present in the existing SWPPP document. The contractor shall then be required to develop a cost estimate to revise the SWPPP.

SWPPP CHECKLIST FOR COMPLIANCE WITH THE NEW PERMITS REQUIREMENTS

Each of the checklist items listed below is a requirement from the General or Caltrans Permit, the SWMP, or the Practice Guidelines. A reference is provided with each of the checklist items identifying the source of the requirement. A reference is also provided to the potential location where the relevant information may be located in the existing SWPPP document based on the instructions in the "Construction Contractor's Guide and Specifications" dated August 1997 (1997 Guide). A reference is also provided to the location in the new SWPPP/WPCP Preparation Manual dated November 2000 (2000 Manual).

Does the existing SWPPP include the following information:

Yes ❑ No❑ **1.** The SWPPP shall include a reference to the Caltrans Permit (Order No. 99-06 DWQ) and the NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The SWPPP document shall continue to reference the regional or statewide permit that was identified in the contract special provisions. The engineer will notify the contractor at a later date to amend the SWPPP to delete any references to local permits. **(General Permit Section C (17), Caltrans Permit Section H (8) b, 1997 Guide Section 400 and 500, 2000 Manual Section 400)**

Yes ❑ No❑ **2.** The contractor shall include into Section 700 of the SWPPP a copy of the Caltrans Permit, Order Number 99-06-DWQ and General Permit, Order No. 99-08-DWQ. **(General Permit Section C (17), Caltrans Permit Section M (1), 1997 Guide Section 700, 2000 Manual Section 500.9)**

Yes ❑ No❑ **3.** For applicable projects, the SWPPP shall delineate the location of, and identify a BMP program for any mobile construction operations that are located within the state's right-of-way or on other property specifically arranged for and provided for by Caltrans for the execution of the project. These operations may include, but not be limited to, asphalt and concrete recycling, mortar and concrete mixing, concrete saw cutting, joint sealing, and material crushing operations. ***The BMPs must also show that they will protect operational storm water inlets or receiving waters from contaminated discharges.*** The department assumes no responsibility for agreements may between the contractor and private landholders. **(General Permit Section A(5)b.2, Caltrans Permit Section H(8)b, 1997 Guide Sections 500.2.2 or .4, 2000 Manual Sections 500.3.1 or .8)**

Yes ❑ No❑ **4.** For applicable projects, the SWPPP shall delineate and identify the corresponding control measures (BMPs) for staging areas, storage yards, material borrow areas if they are located within the state's right-of-way or on other property that is specifically arranged for and provided for by the department for the execution of the project. **(General Permit Section A(5)b.4, Caltrans Permit Section M (1), 1997 Guide Sections 500.2.2.1-.3 or .11 or 500.2.3-.6, 2000 Manual Sections 500.3.6 or 500.4)**

CONTRACT CHANGE ORDER CHECKLIST (Continued)

Yes ❑ No❑ **5.** Project information and pollutant source identification combined with itemized lists of the control practices or measures specifically chosen to control the pollutants listed.

Yes ❑ No❑ (a) Site maps which shows the construction project in detail, the temporary drainage patterns and/or systems shall be delineated and selected to comply with local ordinances, to control erosion, to return flows to their natural drainage courses, and prevent damage to downstream properties. **(General Permit Section A(5)a(2)c, 1997 Guide Sections 500.2.1 or 2.2, 2000 Manual Sections 500.2 or .4)**

Yes ❑ No❑ (b) All calculations of anticipated storm water run-on. **(General Permit Section A(5)b(2), 1997 Guide Section Attachment C, 2000 Manual Sections 300.3 or Attachment E)**

Yes ❑ No❑ (c) Descriptions of temporary control practices implemented to divert off-site drainage volumes around or through the construction project. **(General Permit Section A(5)b(1), 1997 Guide Sections 500.2.2.1 or 500.2.2.3 or .4 or 500.2.10, 2000 Manual Section 500.3.5)**

Yes ❑ No❑ (d) A narrative description of pollutant sources and temporary control practices that cannot be adequately communicated or identified on the site map. **(General Permit Section A(5)c(1), 1997 Guide Sections 500.2.3, 2000 Manual Section 500.3.5)**

Yes ❑ No❑ (e) ~~A narrative description of the preconstruction control measures *(if any) to reduce sediment and other pollutants in storm water discharges shall be included.* including the preconstruction meetings where storm water issues were discussed and training received. (General Permit Section A(5)c(1), 1997 Guide Section 500.2.3.4, 2000 Manual Sections 300.4 or 500.7)~~

Yes ❑ No❑ (f) ~~A response plan to address spills or leaks of oil, petroleum products, substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes.~~

Yes ❑ No❑ (g) A construction activity schedule, which describes major soil-disturbing activities, such as mass grading, paving, lot or parcel improvements, at the site and the proposed time frame to conduct those activities. **(General Permit Section A(5)c(5), 1997 Guide Sections 500.2.2.4, 500.2.2.5, 500.2.2.7 or 500.3, 2000 Manual 500.4)**

Yes ❑ No❑ (h) An implementation schedule that includes timeframes implementing temporary and permanent erosion control measures (soil stabilization) and corresponding sediment control measures. **(General Permit Section A(6)a(4), 1997 Guide Sections 500.2.2.4, 500.2.2.5, 500.2.2.7 or 500.3, 2000 Manual Section 300.4)**

Yes ❑ No❑ (i) The name and telephone number of the qualified person(s) who have been assigned responsibility for pre-storm, post-storm, and storm event inspections of temporary control practices; and the qualified person(s) assigned responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges. **(General Permit Section A(5)c(6), 1997 Guide Section 500.10, 2000 Manual Section 500.4)**

CONTRACT CHANGE ORDER CHECKLIST (Continued)

Yes ❑ No❑ **6.** Copies of the contractor's site inspection checklist that will be used to conduct inspections. The inspection checklist shall be based on the State Water Resources Control Board's (SWRCB) or the Regional Water Quality Control Boards (RWQCB) inspection checklist and at a minimum include:

(a) The weather conditions at the time of the inspection: including the best estimate of the beginning of the precipitation event, the duration of the event, hours or days since the last event, and the approximate rainfall in inches. **(General Permit Section A(11)b, 1997 Guide Section 500.10.1, 2000 Manual Section 500.5 or Attachment G)**

(b) An assessment of all of the Best Management Practices (BMPs) (erosion & sediment controls, chemical & waste controls, and other non-storm water controls) organized by area or quadrant and the condition of each measure. **(General Permit Section A(11)d, 1997 Guide Section 500.10.1, 2000 Manual Section 500.5 or Attachment G)**

(c) The inspector's title. **(General Permit Section A(11)f, 1997 Guide Section 500.10.1, 2000 Manual Section 500.5 or Attachment G)**

Yes ❑ No❑ **7.** Document related training received by the individual(s) responsible for preparing and amending the SWPPP. Training should be both formal and informal, and should include training and/or workshops offered by the SWRCB, the RWQCB, or other recognized agencies or professional organizations. **(General Permit Section A(12), 1997 Guide Section 500.6, 2000 Manual Section 500.7)**

Yes ❑ No❑ **8.** The SWPPP's purpose and objectives includes these items:

(a) "Identify non-storm water discharges," **(General Permit Section A(1)b, 1997 Guide Section 500.1, 2000 Manual Section 500.1)** and

(b) "Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized nonstorm water discharges from the construction site during construction", **(General Permit Section A(1)c, 1997 Guide Section 500.1, 2000 Manual Section 500.1)** and

(c) "Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs)." **(General Permit Section A(1)d, 1997 Guide Section 500.1, 2000 Manual Section 500.1)**

Yes ❑ No❑ **9.** The Non-Compliance Reporting Program should specify: "Should it be determined by the contractor, the department, the SWRCB, or the RWQCB that storm water discharges and/or non-storm water discharges event occurs the contractor shall:

"Implement corrective measures immediately following discovery of a discharge event, followed by notification to the engineer by telephone as soon as possible but no later than 24 hours after the discovery. This notification shall be followed by a report within 7-calendar days to the engineer, unless directed otherwise, describing (1) the nature and cause of the discharge; (2) the BMPs currently being implemented; (3) any additional BMPs which will be implemented to prevent or reduce pollutant discharges; and (4) any maintenance or repair of BMPs. This report shall include an implementation schedule for the corrective actions and shall describe the corrective actions taken." After the report is given to the engineer the additional BMPs and the revised procedures shall be incorporated into the SWPPP as an amendment**. (General Permit Section B(5)b, Caltrans Permit Section C(3)a, SWMP Section 9.3.1.1, 1997 Guide Section 500.10.3 or Attachment K, 2000 Manual Section 600.2)**

CONTRACT CHANGE ORDER CHECKLIST (Continued)

Yes ❑ No❑ **10.** SWPPP amendments are prepared if:

(a) There is a change in construction or operations that may affect the discharge of pollutants to surface waters, ground waters, or a municipal separate storm sewer system (MS4). Or if the discharger violates any condition of this General Permit or has not achieved the general objective of reducing or eliminating pollutants in storm water discharges. If the RWQCB determines that the discharger is in violation of this General Permit, the SWPPP shall be amended and implemented in a timely manner, but in no case more than 14-calendar days after notification by the RWQCB. All amendments should be dated and directly attached to the SWPPP. **(General Permit Section A(4)a, 1997 Guide Sections 200 or 600, 2000 Manual Section 200.1)**

(b) The RWQCB or local agency with the concurrence of the RWQCB may require the discharger to amend the SWPPP. **(General Permit Section A(4)b, 1997 Guide Sections 200 or 600, 2000 Manual Section 200.1)**

Yes ❑ No❑ **11.** A description of the final stabilization activities that meet the following requirements:

- All soil disturbing activities are completed if EITHER OF THE TWO FOLLOWING CRITERIA ARE MET:

(a) A uniform vegetative cover with 70 percent coverage has been established or equivalent stabilization measures have been employed. These measures include the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments. **(General Permit Section A7(1)1, 1997 Guide Sections 500.3 or 500.9, 2000 Manual Sections 500.3.4 or 500.6.1)**

(b) Where background native vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50=.35) would require 35 percent total uniform surface coverage. **(General Permit Section A7(1)2, 1997 Guide Sections 500.3 or 500.9, 2000 Manual Sections 500.3.4 or 500.6.1)**

12. The following information regarding non-storm discharges is included or identified:

Yes ❑ No❑ (a) Description of all non-storm water discharges to receiving waters that are proposed for the construction project. **(General Permit Section A9, 1997 Guide Sections 500.2.4 or 500.4, 2000 Manual Sections 500.3.1, 500.3 or 500.3.9)**

Yes ❑ No❑ (b) Description of procedures to eliminate or reduce to the extent feasible all non-storm water discharges. **(General Permit Section A9, 1997 Guide Sections 500.2.4 or 500.4, 2000 Manual Sections 500.3 or 500.3.9)**

Yes ❑ No❑ (c) The locations of such discharges and descriptions of all BMPs designed for the control of pollutants in such discharges. **(General Permit Section A9, 1997 Guide Sections 500.2.4 or 500.4, 2000 Manual Sections 500.3.1, 500.8 or 500.3.9)**

CONTRACT CHANGE ORDER CHECKLIST (Continued)

Yes ❑ No❑ (d) Identification of a qualified person assigned to monitor one-time discharges and for ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems (consistent with best available treatment/best conventional treatment), and the name and contact number of that person should be included in the SWPPP document. **(General Permit Section A9, 1997 Guide Sections 500.4, 500.5 or Attachment F, 2000 Manual Sections 500.8 or 500.3.9)**

Yes ❑ No❑ **13.** Does the SWPPP ensure that discharges of sediment-laden water which will not cause or contribute to an exceedance of the applicable RWQCB's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain without filtration or equivalent treatment. **(General Permit Section A9, 1997 Guide Section 500.4, 2000 Manual Section 500.8 or 500.3.9)**

14. The following information regarding inspection and maintenance is included or identified:

Yes ❑ No❑ (a) A discussion of the program to inspect and maintain all BMPs as identified in the site plan or other narrative documents throughout the entire duration of the project. **(General Permit Section A11, 1997 Guide Sections 500.5, 500.10.1, or Attachment G or I, 2000 Manual Section 500.5 or Attachment G)**

Yes ❑ No❑ (b) A qualified person will be assigned the responsibility to conduct inspections and the name and telephone number of that person shall be listed in the SWPPP document. **(General Permit Section A11, 1997 Guide Sections 500.5, 500.6, 500.10.1, or Attachment G or I, 2000 Manual Section 500.5 or Attachment G)**

Yes ❑ No❑ (c) Inspections are performed before and after storm events and once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or design changes as soon as feasible depending upon field conditions. **(General Permit Section A11, 1997 Guide Sections 500.5, 500.6, 500.10.1, or Attachment G or I, 2000 Manual Sections 500.5 or Attachment G)**

Yes ❑ No❑ (d) Equipment, materials, and workers are available for rapid response to failures and emergencies. **(General Permit Section A11, 1997 Guide Sections 500.5, 500.6, 500.10.1, or Attachment G or I, 2000 Manual Sections 500.5 or Attachment G)**

Yes ❑ No❑ (e) All corrective maintenance to BMPs is performed as soon as possible after the conclusion of each storm depending upon worker safety. **(General Permit Section A11, 1997 Guide Sections 500.5, 500.6, 500.10.1, or Attachment G or I, 2000 Manual Sections 500.5 or Attachment G)**

Yes ❑ No❑ 15. Compliance with the revised requirements as described below: **(Practice Guidelines Section 4.3.4, 1997 Guide Section 500.3, 2000 Manual Section 500.3.4)**

These disturbed soil area management guidelines are based on rainfall patterns (time frames, intensities, and amounts), general soil types, the seasons, slope inclinations, and slope lengths. All of these factors are considered in developing the appropriate levels of soil stabilization and sediment control, and will be considered by the resident engineer when directing specific site-by-site actions.

CONTRACT CHANGE ORDER CHECKLIST (Continued)

Disturbed soil areas (DSAs) are areas of exposed, erodible soil that are within the construction limits and that result from construction activities. The following are not considered DSAs:

- Areas where soil stabilization, erosion control, highway planting, or slope protection are applied and associated drainage facilities are in place and functional.
- Roadways, construction roads, access roads or contractor's yards that have been stabilized by the placement of compacted subbase or base material or paved surfacing.
- Areas where construction has been completed in conformance with the contract plans and permanent erosion control is in place and functional.

Erosion control is considered functional when a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established or equivalent stabilization measures have been employed.

Active areas are construction areas where soil-disturbing activities have already occurred and continue to occur or will occur during the ensuing 21 days.

Non-active areas are construction areas (formerly active areas) that will be idle for at least 21 days.

The resident engineer will conduct a review of the existing active areas on a regular basis to determine if a nonactive status should be applied to some DSAs.

Slope length is measured or calculated along a continuous inclined surface. Each discrete slope is between one of the following: top to toe, top to bench, bench to bench, and bench to toe.

Benches are drainage facilities that intercept surface flow and convey the resulting concentrated flow away from a slope. For the purpose of determining slope lengths, fiber rolls or other appropriate BMPs (used for temporary sediment control) can be considered equivalent to a bench.

The average rainfall in California varies greatly from region to region. To account for the various rainfall patterns (time frame, intensities, and amounts) the state is separated into several rainy seasons. Figure 4-1 is a map identifying the rainy seasons throughout the state. These rainy seasons are used to identify the appropriate level of soil stabilization and sediment control protection.

To account for rainfall patterns (time frames, intensities, and amounts) and to a lesser extent general soil type differences, the state has been divided into seven areas requiring common protection requirements. These rainfall areas are defined in Table 4-2. The specific temporary erosion and sediment control practices for DSA protection in each area are determined from Tables 4-3 and 4-4. Based on consultation with experts, the slope length and slope inclination are seen as the most important criteria for soil stabilization and sediment control requirements, as these factors have the largest potential impact on the erosion rate. As indicated on these tables, the temporary erosion and sediment controls at a construction site will increase with increasing slope length and slope inclination combination.
DSAs shall be protected as follows:

- Temporary control practices (as required in Table 4-3) shall be performed on nonactive DSAs within 14 days from the cessation of soil-disturbing activities or one day prior to the onset of precipitation, whichever occurs first.

CONTRACT CHANGE ORDER CHECKLIST (Continued)

- Temporary control practices for active DSAs (as required in Table 4-4) shall be performed prior to the onset of precipitation and throughout each day for which precipitation is forecasted.
- For nonactive DSAs, limit the erosive effects of storm water flow on slopes by implementing BMPs, such as fiber rolls or gravel bag berms to break up the slope lengths as follows:
  - *Slope inclination between 1:20 and 1:2: BMPs shall be placed on slopes 30m and greater at intervals no greater than 15m.*
  - Slope inclination 1:2 or greater: BMPs shall be placed on slopes 15m and greater at intervals no greater than 7.5m.
- For nonactive DSAs, permanent erosion control shall be applied to areas deemed substantially complete during the project's defined seeding window.

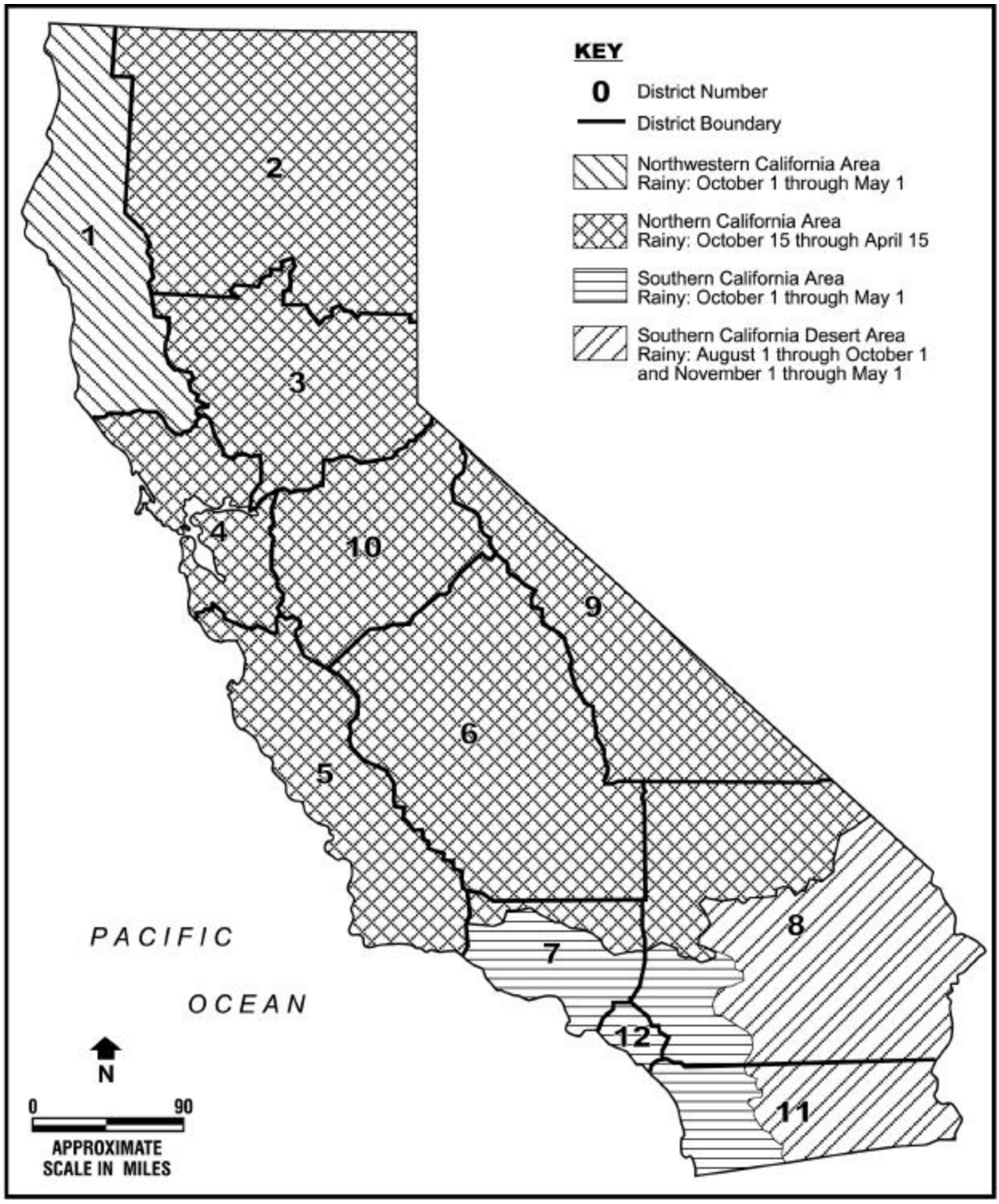

Figure 4 -1
Designation of Rainy Seasons

TABLE 4-2: RAINFALL AREA DEFINITIONS

AREA	DESCRIPTION	
	Applicability	**Elevation**
1	District 1 in the following areas: all of Del Norte and Humboldt Counties within 20 miles of the coast in Mendocino County	≤1200m
2	District 1 (except within Area 1) District 2 within the North Coast and Central Valley RWQCB jurisdictions Districts 3, 4 and 5	<250 m
3	District 1 (except within Area 1) District 2 within the North Coast and Central Valley RWQCB jurisdictions Districts 3, 4 and 5	250m–1200m
4	District 6 within the Central Valley RWQCB jurisdiction District 7 - within the Central Coast, Los Angeles, and Central Valley RWQCB jurisdictions District 8 within the Santa Ana and San Diego RWQCB jurisdictions District 10 District 11 within the San Diego RWQCB jurisdiction District 12	<500m
5	District 6 within the Central Valley RWQCB jurisdiction District 7 within the Central Coast, Los Angeles, and Central Valley RWQCB jurisdictions District 8 within the Santa Ana and San Diego RWQCB jurisdictions District 10 District 11 within the San Diego RWQCB jurisdiction District 12	500m–1200m
6	Statewide	> 1200m
7	District 6 within the Lahontan RWQCB jurisdiction District 7 within the Lahontan RWQCB jurisdiction District 8 within the Lahontan and Colorado River Basin RWQCB jurisdictions District 9 within the Lahontan RWQCB jurisdiction District 11 within the Colorado River Basin RWQCB jurisdiction	≤1200m

TABLE 4-3: RECOMMENDED COMBINATION OF TEMPORARY SOIL STABILIZATION AND TEMPORARY LINEAR SEDIMENT BARRIERS [7] [8]

NONACTIVE DISTURBED SOIL AREAS						
SEASON	AREA DESIG.	TEMPORARY BMP	SLOPE (V:H)[1]			
			≤ 1:20	> 1:20 ≤ 1:4	> 1:4 ≤ 1:2	> 1:2
RAINY	AREAS 1 & 6	SOIL STABILIZATION [5]	X	X	X	X
		LINEAR SEDIMENT BARRIER [2] [5]	X	X	X	X
		DESILTING BASIN [3]		X	X	X
	AREAS 2, 3, 4 & 5	SOIL STABILIZATION [5]	X	X	X	X
		LINEAR SEDIMENT BARRIER [2]		X	X	X
		DESILTING BASIN				
	AREA 7	SOIL STABILIZATION				
		LINEAR SEDIMENT BARRIER [2] [6]	X	X	X	X
		DESILTING BASIN				
NON-RAINY	AREA 1	SOIL STABILIZATION [5]	X [4]	X [4]	X	X
		LINEAR SEDIMENT BARRIER [2]		X [4]	X	X
		DESILTING BASIN				
	AREAS 2, 4 & 7	SOIL STABILIZATION				
		LINEAR SEDIMENT BARRIER				
		DESILTING BASIN				
	AREAS 3 & 5	SOIL STABILIZATION				
		LINEAR SEDIMENT BARRIER [2]				X
		DESILTING BASIN				
	AREA 6	SOIL STABILIZATION [5]	X [4]	X [4]	X	X
		LINEAR SEDIMENT BARRIER [2]		X [4]	X	X
		DESILTING BASIN [3]				X

1. Unless otherwise noted, the temporary BMP is required for the slope inclinations indicated on slope lengths greater than 3 meters. The maximum slope length is 30 meters for slope inclinations between 1:20 and 1:2 and 15 meters for steeper slopes.
2. Temporary desilting basin may be implemented in lieu of temporary linear sediment barrier if both are not specifically required by note 3.
3. Required in addition to the temporary linear sediment barrier, where feasible. Feasibility will depend on site-specific factors such as available right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.
4. Implementation of controls not required except directly prior to predicted rain.
5. The indicated temporary BMP is required on all slope lengths.
6. For disturbed soil areas that are within five miles of the Salton Sea or the Colorado River and also within 150 meters of a permanent or intermittent stream as identified on an USGS quad map, the temporary BMPs indicated will be required.
7. Linear barrier systems are equivalent to what are sometimes referred to as perimeter systems. The intent is to provide a barrier to the transport of sediment at the downslope edge of disturbed soil areas.
8. Permanent erosion control seeding shall be applied during the defined seeding window to all nonactive areas deemed substantially complete.

TABLE 4-4: RECOMMENDED COMBINATION OF TEMPORARY SOIL STABILIZATION AND TEMPORARY LINEAR SEDIMENT BARRIERS [8]

ACTIVE DISTURBED SOIL AREAS [4]					
SEASON	AREA DESIG.	TEMPORARY BMP	SLOPE (V:H) [1]		
			≤ 1:20	> 1:20 ≤ 1:2	> 1:2
RAINY	AREAS 1 & 6	SOIL STABILIZATION [4]		X	X
		LINEAR SEDIMENT BARRIER [2] [5]	X	X	X
		DESILTING BASIN [3]		X	X
	AREAS 2, 4 & 5	SOIL STABILIZATION			
		LINEAR SEDIMENT BARRIER [2]		X	X
		DESILTING BASIN [3]			X [6]
	AREA 3	SOIL STABILIZATION [4]			X [6]
		LINEAR SEDIMENT BARRIER [2]		X	X
		DESILTING BASIN [3]			X [6]
	AREA 7	SOIL STABILIZATION			
		LINEAR SEDIMENT BARRIER [2] [7]	X	X	X
		DESILTING BASIN			
NON-RAINY	AREA 1	SOIL STABILIZATION			
		LINEAR SEDIMENT BARRIER [2]		X	X
		DESILTING BASIN [3]			X [6]
	AREAS 2, 3, 4, 5 & 7	SOIL STABILIZATION			
		LINEAR SEDIMENT BARRIER			
		DESILTING BASIN			
	AREA 6	SOIL STABILIZATION			
		LINEAR SEDIMENT BARRIER [2]		X	X
		DESILTING BASIN [3]			X

1. Unless otherwise noted, the BMP is required for the slope inclinations indicated on slope lengths greater than three meters.
2. Temporary desilting basin may be implemented in lieu of temporary linear sediment barrier if both are not specifically required by Note 3.
3. Required in addition to the temporary linear sediment barrier, where feasible. Feasibility will depend on site-specific factors, such as available right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.
4. Implementation of controls not required except directly prior to predicted rain.
5. The indicated temporary BMP is required on all slope lengths.
6. The indicated temporary BMP is required on slope lengths greater than 15 meters where feasible (see Note 3).
7. For disturbed soil areas that are within five miles of the Salton Sea or the Colorado River and also within 150 meters of a permanent or intermittent stream as identified on an United States Geologic Survey quad map, the temporary BMPs indicated will be required.
8. Linear barrier systems are equivalent to what are sometimes referred to as perimeter systems. The intent is to provide a barrier to the transport of sediment at the downslope edge of disturbed soil areas.

..

CONTRACT CHANGE ORDER CHECKLIST (Continued)

The practices described herein are typical of those that will be implemented on a project-by-project basis. However, it is important to note that there will be instances where project and site conditions require deviation from the BMPs and the descriptions described in these Guidelines. For instance, the proposed implementation of desilting basins is a new commitment that has not been incorporated into existing designs. In addition, the nature of linear projects and constrained rights-of-way inherent to Caltrans work may prohibit the use of desilting basins at some locations on certain projects and on some projects altogether. Implementation of desilting basins will be considered on a project-by-project basis. Caltrans is committed to refining the desilting basin implementation criteria during the term of this permit while implementing the desilting basins on projects as practicable.

Yes ❑ No❑ **16**. **Compliance with the revised requirements as described below: (Practice Guidelines Section 4.3.4.3, 1997 Guide Section 500.2.2.2, 500.2.2.3 or 500.3.6, 2000 Manual Section 500.3.9)**

Soil stabilization and sediment control requirements as they apply to stockpiles of various materials are presented in Section 4.5.14 of the Guidelines.

Stockpile Management

Description:

Procedures and practices designed to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials.

Appropriate Applications:

Typically implemented anywhere soil and paving materials are stockpiled.

Implementation:

- Protection of stockpiles is a year-round requirement.
- All stockpiles shall be located away from concentrated flows of storm water, drainage courses, and inlets.
- All stockpiles shall be protected from storm water run-on, using berms, dikes or other temporary diversion BMPs.
- Wind erosion control practices shall be implemented as appropriate on all stockpiled material. For specific information, see Section 4.5.8.
- Stockpiles of contaminated soil shall be managed in accordance with the Contaminated Soil Management BMP.
- Nonactive stockpiles of the identified materials shall be protected further as follows:
  - Soil stockpiles
    - ➢ During the rainy season, soil stockpiles shall be covered or protected with soil stabilization measures and a temporary perimeter sediment barrier at all times.
    - ➢ During the non-rainy season, soil stockpiles shall be covered or protected with a temporary perimeter sediment barrier prior to the onset of precipitation.
  - Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate subbase:

CONTRACT CHANGE ORDER CHECKLIST (Continued)

- During the rainy season, the stockpiles shall be covered or protected with a temporary perimeter sediment barrier at all times.
- During the non-rainy season, the stockpiles shall be covered or protected with a temporary perimeter sediment barrier prior to the onset of precipitation.

Stockpiles of "cold mix" asphalt (pre-mixed aggregate and asphalt binder):

- During the rainy season, these stockpiles shall be placed on and covered with plastic or comparable material at all times.
- During the dry season, these stockpiles shall be placed on and covered with plastic or comparable material prior to the onset of precipitation.

– **Active stockpiles of the identified materials shall be protected further as follows:**

- **All stockpiles shall be covered or protected with a temporary linear sediment barrier prior to the onset of precipitation.**
- **Stockpiles of "cold mix" shall be covered with plastic or comparable material prior to the onset of precipitation.**

Maintenance: Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.

Yes ❑ No❑ ***17.*** ***A sediment basin shall have a means for dewatering within seven-calendar days following a storm event. (General Permit Section A 8, 1997 Guide Section 500.3, 2000 Manual Section 500.3.5)***

Yes ❑ No❑ ***18.*** ***Compliance with the revised requirements as described below: (Practice Guidelines Section 4.5.17, 1997 Guide Section 500.4, 2000 Manual Sections 500.3.9)***

Dewatering operations are practices that manage the discharge of pollutants from groundwater and accumulated precipitation dewatering operations. These practices are typically implemented where groundwater or accumulated precipitation will be discharged from a construction site. The flow chart shown in Figure 4-15 shall be utilized to guide dewatering operations. Discharges must comply with regional and watershed-specific discharge requirements. Ensure that dewatering discharges do not cause erosion at the discharge point. Dewatering effluent (groundwater and accumulated precipitation) that is laden with suspended solids shall be treated by a device designed to remove soil particles down to 0.02 mm in size.